



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2011-1341; Directorate Identifier 2011-NE-41-AD; Amendment 39-16891; AD 2011-25-51]**

**RIN 2120-AA64**

**Airworthiness Directives; Continental Motors, Inc. (CMI) Reciprocating Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Continental Motors, Inc. (CMI) models TSIO-520, TSIO-550-K, TSIOF-550K, and IO-550-N series reciprocating engines. This emergency AD was sent previously to all known U.S. owners and operators of these engines. This AD requires replacing affected CMI starter adapters with starter adapters eligible for installation. This AD was prompted by 5 reports received of fractures in starter adapter shaft gears in certain part number (P/N) CMI starter adapters. We are issuing this AD to prevent failure of the starter adapter gear shaft, leading to an inoperable oil scavenge pump and engine in-flight shutdown.

**DATES:** This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] to all persons except those persons to whom it was made immediately effective by Emergency AD 2011-25-51, issued on November 29, 2011, which contained the requirements of this amendment.

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Continental Motors, Inc., PO Box 90, Mobile, AL 36601; phone: 251-438-3411, or go to:  
<http://tcmlink.com/servicebulletins.cfm>.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Anthony Holton, Aerospace Engineer, Atlanta Certification Office, FAA, Small Airplane Directorate, 1701 Columbia Avenue, Atlanta, GA 30337; phone: 404-474-5567; fax: 404-474-5567; e-mail: [anthony.holton@faa.gov](mailto:anthony.holton@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

On November 29, 2011, we issued Emergency AD 2011-25-51, which requires replacing affected CMI starter adapters with starter adapters eligible for installation. This

action was prompted by 5 reports received of fractures in starter adapter shaft gears in certain P/N CMI starter adapters. This condition, if not corrected, could result in failure of the starter adapter gear shaft, leading to an inoperable oil scavenge pump and engine in-flight shutdown.

#### **Relevant Service Information**

We reviewed CMI Mandatory Service Bulletin (MSB) No. MSB11-4, dated November 23, 2011. The MSB describes the affected starter adapters, and describes what starter adapters are eligible for installation.

#### **FAA's Determination**

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

#### **AD Requirements**

This AD requires replacing affected CMI starter adapters with starter adapters eligible for installation.

#### **Differences Between the AD and the Service Information**

The CMI MSB No. MSB11-4, dated November 23, 2011 requires reporting. This emergency AD does not.

#### **FAA's Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because of the short compliance time required to remove the affected parts from service. Therefore, we find that notice and opportunity for prior public comment are impracticable and that good cause exists for making this amendment effective in less than 30 days.

## **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, we invite you to send any written data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2011-1341 and Directorate Identifier 2011-NE-41-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

## **Costs of Compliance**

We estimate that this AD will affect 195 engines installed on airplanes of U.S. registry. We also estimate that it will take about 4 work-hours per engine to perform the actions required by this AD, and that the average labor rate is \$85 per work-hour. Required parts will cost about \$500 per engine. Based on these figures, we estimate the total cost of the AD to U.S. operators to be \$163,800.

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds

necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2011-25-51 **Continental Motors, Inc. (formerly Teledyne Continental Motors, Continental):** Amendment 39-16891; Docket No. FAA-2011-1341; Directorate Identifier 2011-NE-41-AD.

**(a) Effective Date**

This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] to all persons except those persons to whom it was made immediately effective by Emergency AD 2011-25-51, issued on November 29, 2011, which contained the requirements of this amendment.

**(b) Affected ADs**

None.

**(c) Applicability**

This emergency AD applies to Continental Motors, Inc. (CMI) TSIO-520-B, BB, D, DB, E, EB, J, JB, K, KB, N, NB, UB, VB; TSIO-550-K; TSIOF-550-K; IO-550-N (Turbo-normalized only; STC SE10589SC); with a starter adapter part number (P/N) 642085A17, 642085A19, 642085A20, 642085-1A1, and R-642085A17, installed, where the engine was manufactured between January 1, 2011 and November 20, 2011, or, where a replacement new or rebuilt starter adapter that was purchased from Continental Motors, Inc. and installed between January 1, 2011 and November 20, 2011.

**(d) Unsafe Condition**

This AD was prompted by 5 reports received of fractures in starter adapter shaft gears in certain P/N CMI starter adapters. We are issuing this AD to prevent failure of the starter adapter gear shaft, leading to an inoperable oil scavenge pump and engine in-flight shutdown.

**(e) Compliance**

Comply with this AD within the compliance times specified, unless already done.

(1) For starter adapters with less than 75 hours of total time-in-service (TIS) on the effective date of this AD, before further flight, replace the starter adapter with a starter adapter eligible for installation.

(2) For starter adapters with between 75 and 100 hours of total TIS, inclusive on the effective date of this AD, within the next 10 hours of engine operation, or before exceeding 100 hours TIS, whichever occurs first, replace the starter adapter with a starter adapter eligible for installation.

(3) For starter adapters with more than 100 hours of total TIS on the effective date of this AD, no further action is required.

**(f) Definition**

For the purpose of this AD, a starter adapter eligible for installation is:

(1) A starter adapter with one of the P/Ns listed in this AD that has a vibro-peened manufacturer code below the ink stamped P/N on the starter adapter, or

(2) A starter adapter with one of the P/Ns listed in this AD that has more than 100 hours total TIS.

**(g) Alternative Methods of Compliance (AMOCs)**

The Manager, Atlanta Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

**(h) Related Information**

(1) For further information about this AD, contact: Anthony Holton, Aerospace Engineer, Atlanta Certification Office, FAA, Small Airplane Directorate, 1701 Columbia Avenue, Atlanta, GA 30337; phone: 404-474-5567; fax: 404-474-5567; e-mail: [anthony.holton@faa.gov](mailto:anthony.holton@faa.gov).

(2) CMI Mandatory Service Bulletin No. MSB11-4, dated November 23, 2011, pertains to this AD.

(3) For copies of the service information referenced in this AD, contact:

Continental Motors, Inc., PO Box 90, Mobile, AL 36601; phone: 251-438-3411, or go to: <http://tcmlink.com/servicebulletins.cfm>. You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on December 5, 2011.

Peter A. White,  
Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.

[FR Doc. 2011-31794 Filed 12/12/2011 at 8:45 am; Publication Date: 12/13/2011]